

From: Marc Ferries
Sent: Monday, March 13, 2023 4:35 PM
To: Dollhopf, Ralph; Kelly, Jack (R3 Phila.)
Cc: Garypie, Catherine; Cahn, Jeffrey; Dixit, Naeha; Clark, Jacqueline (she/her/hers); Eiseman, Robin; david.schoendorfer@nscorp.com; Veira, E. Fitzgerald; Matthew.Gernand; Peggy.Otum@wilmerhale.com; hollister.hill@nscorp.com; geoffrey.rathgeber@nscorp.com; robert.wood2_nscorp.com; Aufdenkampe, Steven R.; R5_OPS; R5_PSC; R5_ENVL; R5_SITL; R5_DATA; R5_DOCL
Subject: East Palestine Train Derailment Site - Directive #2 Data Inventory Deliverable
Attachments: Data Element Table.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Ralph, Jack, and Ann:

The United States Environmental Protection Agency's Site Directive #2 dated March 12, 2023 (the "Directive") requires Norfolk Southern Railway Company ("Norfolk Southern") to submit a Data Inventory within one calendar day of the Directive, which is March 13, 2023. In accordance with the Directive, please find the Data Inventory attached.

Regards, Marc

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Data Element	What organization collected the information?	Is an electronic form of that information currently available? If so, provide brief description of data storage system and data format. If not, explain.	Can the information be provided in a web-based data service and made immediately available to EPA? If not, explain.	Contact information for the NSR representative and the contractor representative capable of coordinating data sharing.	Will the format or system for data management of this information change as NSR rolls out longer-term solutions (for example, uploading to the R5 Environmental Quality Information System (“EQIIS”))? If so, describe the change to take place and the anticipated timing for that change.
Air monitoring locations, stationary	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. This data is also available on the CTEH project website. Custom formats can be produced but may require further planning.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.
Air monitoring data, stationary	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of daily summaries are currently available on the NS SharePoint site.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. This data is also available on the CTEH project website. Custom formats can be produced but may require further planning.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.

Air monitoring locations, roving	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. PDF copies of lab reports and daily summaries are currently available on the NS SharePoint site. This data is also available on the CTEH project website. Custom formats can be produced but may require further planning.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.
Air monitoring data, roving	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. PDF copies of lab reports and daily summaries are currently available on the NS SharePoint site. This data is also available on the CTEH project website. Custom formats can be produced but may require further planning.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.

Air sampling, locations	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of locations and daily summaries are currently available on the NS SharePoint site.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. Custom formats can be produced but may require further planning. This data is also available on the CTEH project website.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.
Air sampling, data	CTEH / Pace	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of lab reports and daily summaries are currently available on the NS SharePoint site.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. This data is also available on the CTEH project website. Custom formats can be produced but may require further planning.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.

In-home Air Assessments, locations	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of inspection reports are currently available on the NS SharePoint site.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. This data is also available on the CTEH project website.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.
In-home Air Assessment, data	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of inspection reports are currently available on the NS SharePoint site.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. This data is also available on the CTEH project website.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.
In-home Air Assessment call-logs and notes.	CTEH	Data is stored in an internally developed call intake and ticketing application and database.	Data can be accessed through the web by CSV or Excel download. An API is also available for programmatic data access.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.

Surface water sample, locations	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of daily summaries are currently available on the NS SharePoint site.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. This data is also available on the CTEH project website.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.
Surface water sample, data	CTEH / Pace	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of lab reports and daily summaries are currently available on the NS SharePoint site. This data is also available on the CTEH project website.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.

Potable well sample locations with associated well boring data and field sampling information	AECOM / Stantec Field forms Arcadis well boring data	Potable well field sampling forms and well boring logs (pdf) are available on Stantec NS SharePoint. Locations (static shared) and shapefile in works (KG)	This information can be provided as a pdf on a SharePoint site. Recently generated data with geo-spatial reference can be provided in ESRI Web service.	Tom Cole, Stantec Thomas.Cole@Stantec.com 517-712-7969	The final format will be outlined in the final data management plan.
Potable well sample, sample analysis data	Stantec / Eurofins	Laboratory Final Data Packages are uploaded to the Norfolk Southern SharePoint Site, as well as the Stantec NS SharePoint Site. Validated Laboratory EDDs are available on the Stantec NS SharePoint Site and have been uploaded into the Stantec EQUiS database currently housing validated laboratory results (both AECOM and Stantec).	Validated Potable well analytical data is available from Stantec's EQUiS database. PDF versions of the Final Laboratory Data Package are available on both NS and Stantec NS SharePoint AECOM validated data was transferred into an EQUiS database and the final laboratory data packages are on the NS SharePoint and the Stantec NS SharePoint.	Brigid Zvirbulis, Stantec Brigid.zvirbulis@stantec.com 248-522-8304 for fixed laboratory data Carole Lieu, Stantec Carole.Lieu@stantec.com 226-929-7875 for EQUiS database information	The final format will be outlined in the final data management plan.

<p>All other well locations NSR is managing data for, including but not limited to: (1) existing and proposed monitoring wells; (2) sentinel monitoring wells; and (3) municipal groundwater wells</p>	<p>Stantec</p>	<p>Laboratory Final Data Packages are uploaded to the Norfolk Southern SharePoint Site, as well as the Stantec NS SharePoint Site. Validated Laboratory EDDs are available on the Stantec NS SharePoint Site and have been uploaded into the Stantec EQuIS database currently housing validated laboratory results (both AECOM and Stantec).</p> <p>Stantec Could share figures (pdf) of proposed SMW locations, well construction logs, development logs, purge logs; shapefile for municipal/sentinel; waiting on shapefile for private; pdf sampling logs for municipal wells.</p>	<p>Validated Potable well analytical data is available from Stantec's EQuIS database.</p> <p>PDF versions of the Final Laboratory Data Package are available on both NS and Stantec NS SharePoint</p>	<p>Michael Hutchinson, Stantec Michael.hutchinson@stantec.com 770-846-8716</p> <p>Brigid Zvirbulis Stantec, Brigid.zvirbulis@stantec.com 248-522-8304 for fixed laboratory data</p> <p>Carole Lieu, Stantec Carole.Lieu@stantec.com 226-929-7875 for EQuIS database information</p> <p>Tom Cole, Stantec Thomas.Cole@Stantec.com 517-712-7969</p>	<p>The final format will be outlined in the final data management plan.</p>
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All other well locations NSR is managing data for, including but not limited to: (1) existing and proposed monitoring wells;	ARCADIS	Yes, NS data portal for work plans and associated maps and ArcGIS Pro (internal to Arcadis)	Feature service (line, point, and polygon) can be provided through AGO online for Arcadis online web maps	Dennis Capria Dennis.capria@arcadis.com 315-751-1672 Carolyn Grogan Carolyn.grogan@arcadis.com 614-271-6586	The final format will be outlined in the final data management plan.
Sampling and analysis data from all other well locations	ARCADIS / Eurofins	Yes, tablet data collection and EQulS database for analytical data (internal to Arcadis)	No – QA/QC required prior to publishing on NS data portal	Dennis Capria Dennis.capria@arcadis.com 315-751-1672 Carolyn Grogan Carolyn.grogan@arcadis.com 614-271-6586	The final format will be outlined in the final data management plan.
Surface water monitoring, locations	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of daily summaries are currently available on the NS SharePoint site.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. This data is also available on the CTEH project website.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.

Surface water monitoring, data	CTEH	Data is stored in a PostgreSQL database with a CTEH specific schema. It can be exported to the format outlined in the final data management plan. PDF copies of lab reports and daily summaries are currently available on the NS SharePoint site.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. This data is also available on the CTEH project website.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.
Sediment Sampling, locations	ARCADIS	Yes, NS data portal for work plans and associated maps and ArcGIS Pro (internal to Arcadis)	Feature service (line, point, and polygon) can be provided through AGO online for Arcadis online web maps	Dennis Capria Dennis.capria@arcadis.com 315-751-1672 Carolyn Grogan Carolyn.grogan@arcadis.com 614-271-6586	The final format will be outlined in the final data management plan.
Sediment Sampling, data	ARCADIS	Yes, EQUIS database for analytical data (internal to Arcadis)	No – QA/QC required prior to publishing on NS data portal	Dennis Capria Dennis.capria@arcadis.com 315-751-1672 Carolyn Grogan Carolyn.grogan@arcadis.com 614-271-6586	The final format will be outlined in the final data management plan.

All other georeferenced features NSR has collected or managed as part of the response. This includes but is not limited to: (1) point / line / area features depicting operational areas of interest; (2) excavational areas; (3) personnel and equipment staging areas; (4) waste staging and transfer areas; (5) drainage and surface water features, including dams and underflow dams; (5) hard and soft boom areas; (6) material product recovery areas (7) surface water sparging and (8) any other mitigation or engineering control location not already covered	ARCADIS	Yes, NS data portal for work plans and associated maps	ArcGIS Pro (internal to Arcadis). Feature service (line, point, and polygon) can be provided through AGO online for Arcadis online web maps.	Arcadis – Carolyn Grogan and Dennis Capria	The final format will be outlined in the final data management plan.
Unmanned Aerial Systems (UAS) collected data	ARCADIS	Yes, available via the USEPA SharePoint	Yes, already implemented	Arcadis – Carolyn Grogan and Dennis Capria	The final format will be outlined in the final data management plan.

Phase I – Residential, Commercial, Agricultural Soil Sampling Workplan, locations	ARCADIS	Yes, NS data portal for work plans and associated maps and ArcGIS Pro (internal to Arcadis)	Feature service (line, point, and polygon) can be provided through AGO online for Arcadis online web maps	Arcadis – Carolyn Grogan and Dennis Capria	The final format will be outlined in the final data management plan.
Phase I – Residential, Commercial, Agricultural Soil Sampling Workplan, data	ARCADIS / Eurofins	Yes, NS data portal for inspection reports, plans and associated maps. Laboratory reports will also be available on SharePoint as they come in.	No – QA/QC required prior to publishing on NS data portal. Yes, EQuIS database for analytical data (internal to Arcadis)	Arcadis – Carolyn Grogan and Dennis Capria	The final format will be outlined in the final data management plan.
Confirmation Soil Sampling, locations	ARCADIS	Yes, NS data portal for work plans and associated maps.	ArcGIS Pro (internal to Arcadis). Feature service (line, point, and polygon) can be provided through AGO online for Arcadis online web maps.	Arcadis – Carolyn Grogan and Dennis Capria	The final format will be outlined in the final data management plan.
Confirmation Soil Sampling, data	ARCADIS / Eurofins	Yes, NS data portal for work plans and associated maps. PDF Laboratory reports are available on the NS SharePoint.	Yes, EQuIS database for analytical data (internal to Arcadis) No – QA/QC required prior to publishing on NS data portal	Arcadis – Carolyn Grogan and Dennis Capria	The final format will be outlined in the final data management plan.

Site Photos	CTEH	Not currently.	Yes. The data can be provided as an ESRI REST service for consumption by ArcGIS online, etc. Photos for air monitoring, sampling, and site observations are stored in a file server file system. Meta data such as descriptions and coordinates are stored in a PostgreSQL database with a CTEH specific schema.	Eric Callahan ecallahan@cteh.com 501-366-1525	The final format will be outlined in the approved data management plan.
Site photos	Stantec / AECOM	Not currently.	Photos are geo referenced and/or labeled with location IDs.	Tom Cole, Stantec Thomas.Cole@Stantec.com 517-712-7969	The final format will be outlined in the final data management plan.
All metadata for all geodata	CTEH / Arcadis / Stantec	Dependent on corresponding data.	TBD	NA	
Any fate and transport or groundwater flow models	NA				
Any other georeferenced data NS is managing for the response	TBD				